**LESSON PLAN**

**COMMUNICATION OVER DISTANCES**

**GRADES K-2**

**SUMMARY**

Students will investigate tools that help people communicate over distances. Duration: 30 minutes.

**ENGAGE**

Use a common clapping pattern to get your students’ attention. Continue clapping and have students clap the pattern back to you. Next, move farther away from the students and continue to clap. Come back closer to the students and ask what they noticed. Students might mention that they could still hear your clapping when you were farther away, but it wasn’t as loud. Segue to the lesson by telling students that today they will use light or sound to communicate with their classmates.

**EXPLOR**

Show students the choices of materials they will have to communicate over a distance with a partner. Ask students to think about how each of the items could be used to communicate numbers. Have students share ideas. Explain that students will choose a specific tool to communicate numbers to a partner who will be on the other side of the classroom. Have students demonstrate their ideas on how to communicate a specific number, such as 3.

Next give students index cards and markers and have them write simple addition problems using numbers 1-10. Remind students not to let their partner see their math problems.

After students choose their tools, separate the pairs of students across the room. Outside might work better due to noise. One student will communicate a math addition problem by pausing for a few seconds between numbers. The

**MATERIALS**

- Index cards
- Markers
- Large plastic container
- Flashlights
- Triangles (Instruments)
- Kazoos

**DIY Activity**

- 2 Paper cups
- Piece of string
- 2 Paper clips
- Sharp pencil
- Pair of scissors
other student will try to figure out the answer to the problem and use their tool to communicate the answer. Students will switch partners and take turns doing problems and communicating answers. For more advanced students use a subtraction or a multiplication scenario.

**EXPLAIN**

Have students share their experiences out loud. Prompt with questions. “How many of you were correct with your math problems?” “What was the most difficult part about this challenge?”

Today you communicated over a distance using light or sound. Now let’s watch the video and pay close attention to other ways that people communicate using light or sound.

**ELABORATE**

**WATCH THE GENERATION GENIUS COMMUNICATING OVER DISTANCES VIDEO AS A GROUP**

Facilitate a conversation using the Discussion Questions.

**EVALUATE**

Students can play the online Kahoot! quiz game located below the video which provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz or the exit ticket questions. All these resources are located below the video in the Assessment section.

**EXTENSION**

Have students use Morse code and a flashlight to spell their names.